

communicate_quiz

May 28, 2020

```
In [9]: # imports and load data
import pandas as pd
import numpy as np
import matplotlib as mtb
df= pd.read_csv('store_data.csv')
```

```
In [22]: # explore data
```

```
df.plot(kind='hist')
```

```
df.head()
```

```
df.describe()
```

```
df.info()
```

```
df.tail()
```

```
<class 'pandas.core.frame.DataFrame'>
```

```
RangeIndex: 200 entries, 0 to 199
```

```
Data columns (total 6 columns):
```

```
week      200 non-null object
```

```
storeA    200 non-null int64
```

```
storeB    200 non-null int64
```

```
storeC    200 non-null int64
```

```
storeD    200 non-null int64
```

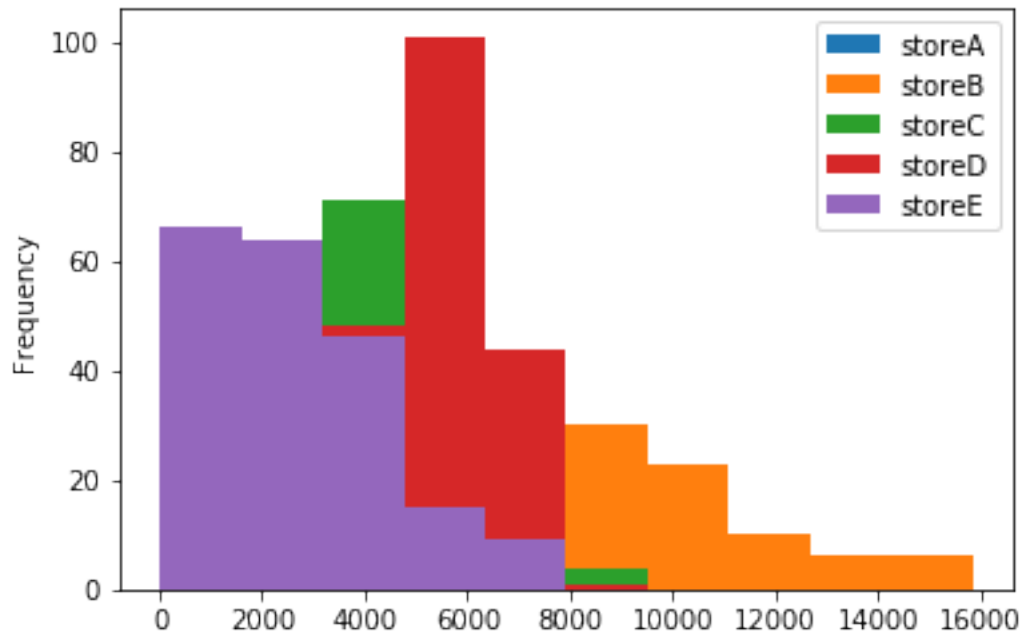
```
storeE    200 non-null int64
```

```
dtypes: int64(5), object(1)
```

```
memory usage: 9.5+ KB
```

```
Out[22]:
```

	week	storeA	storeB	storeC	storeD	storeE
195	2018-01-28	282	6351	7759	5558	1028
196	2018-02-04	4853	6503	4187	5956	1458
197	2018-02-11	9202	3677	4540	6186	243
198	2018-02-18	3512	7511	4151	5596	3501
199	2018-02-25	7560	6904	3569	5045	2585



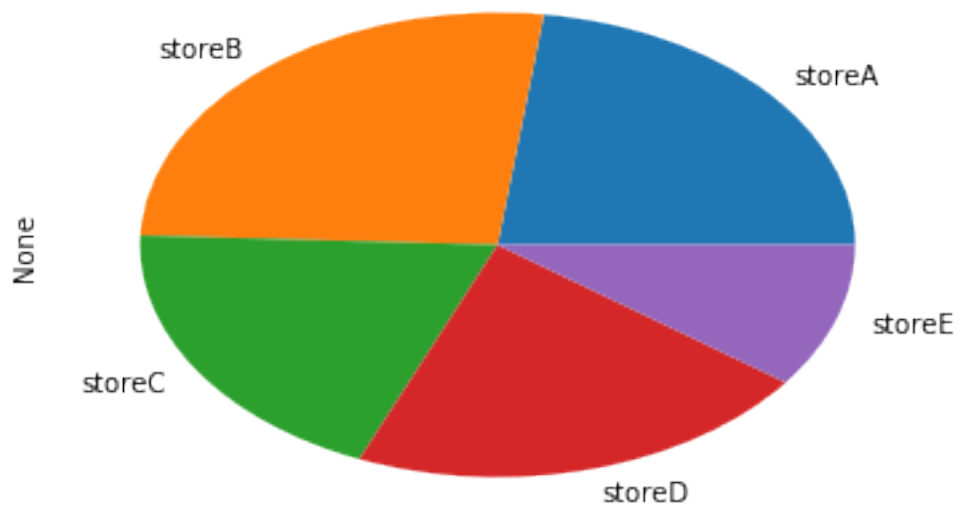
```
In [27]: # sales for the last month
df[df['week']==df['week'].max()]
```

```
Out[27]:
```

	week	storeA	storeB	storeC	storeD	storeE
199	2018-02-25	7560	6904	3569	5045	2585

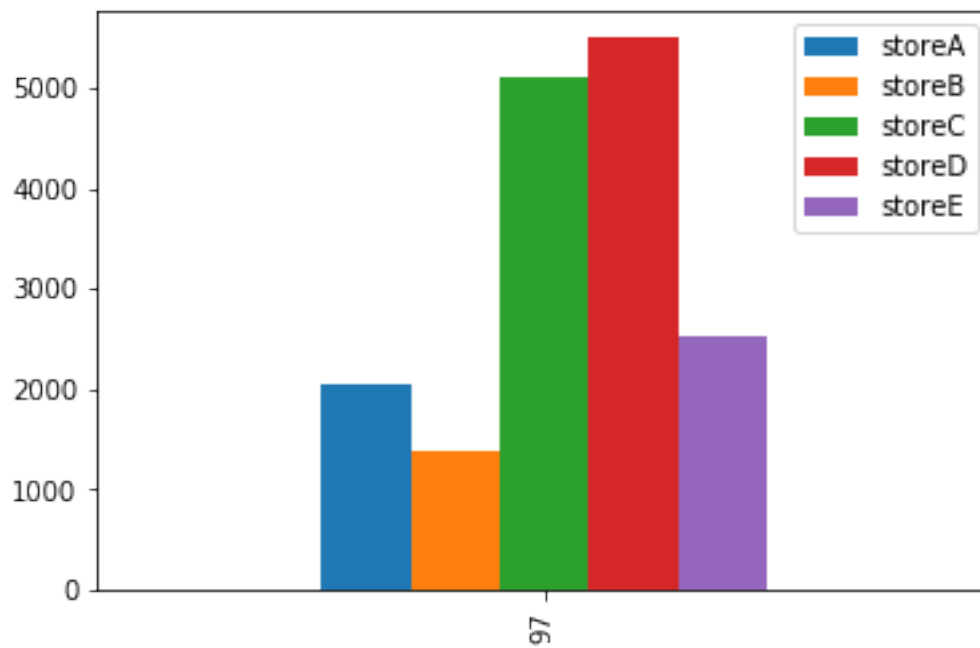
```
In [41]: # average sales
df.mean().plot(kind='pie')
```

```
Out[41]: <matplotlib.axes._subplots.AxesSubplot at 0x7f4b6a3b84a8>
```



```
In [42]: # sales for the week of March 13th, 2016
         df[df['week']=='2016-03-13'].plot(kind='bar')
```

```
Out[42]: <matplotlib.axes._subplots.AxesSubplot at 0x7f4b6a67ef28>
```



```
In [31]: # sales for the latest 3-month periods
df.tail()
```

```
Out[31]:
```

	week	storeA	storeB	storeC	storeD	storeE
195	2018-01-28	282	6351	7759	5558	1028
196	2018-02-04	4853	6503	4187	5956	1458
197	2018-02-11	9202	3677	4540	6186	243
198	2018-02-18	3512	7511	4151	5596	3501
199	2018-02-25	7560	6904	3569	5045	2585

```
In [44]: df.sum()
```

```
Out[44]:
```

week	2014-05-04	2014-05-11	2014-05-18	2014-05-25	2014-0...
storeA					1173096
storeB					1351342
storeC					988421
storeD					1086281
storeE					516005
dtype:	object				

```
In [ ]:
```